

What is claimed is:

- 5 1. A method for producing a recombinant protein product under the control of an inducible promoter comprising: (a) introducing an expression vector encoding a recombinant protein product under the control of an inducible promoter into a bacterial host cell that is genetically deficient in at least one system for active transport of an inducer of the promoter into the host cell; and (b) inducing expression of the product with the inducer.
- 10 2. The method of claim 1, wherein the inducible promoter is an *araB* promoter.
- 15 3. The method of claim 2, wherein the inducer is arabinose.
4. The method of claim 3, wherein the host cell cannot grow on arabinose.
- 20 5. The method of claim 1, 2, 3 or 4, wherein the host cell is *E. coli*.
6. The method of claim 5, wherein the host cell is deficient in the low affinity arabinose transport system encoded by the *araE* gene.
- 25 7. The method of claim 5, wherein the host cell is deficient in the high affinity arabinose transport system encoded by the *araFGH* genes.
8. The method of claim 5, wherein the host cell is deficient in both the high affinity arabinose transport system encoded by the *araFGH* genes and the low affinity arabinose transport system encoded by the *araE* gene.
- 30 9. The method of claim 1 further comprising a step of recovering the product from the induced host cells.

10. A bacterial host cell that is deficient in one or more of the active transport systems for an inducer of an inducible promoter, wherein the host cell contains a recombinant expression vector encoding a recombinant protein product under the control of the inducible promoter.

5

11. The host cell of claim 10, wherein the inducible promoter is an *araB* promoter.

12. The host cell of claim 11, where the inducer is arabinose.

10

13. The host cell of claim 12, wherein the host cell cannot grow on arabinose.

15

14. The host cell of claim 10, 11, 12, or 13, wherein the host cell is *E. coli*.

15. The host cell of claim 14, wherein the host cell is deficient in the low affinity arabinose transport system encoded by the *araE* gene.

20

16. The host cell of claim 14, wherein the host cell is deficient in the high affinity arabinose transport system encoded by the *araFGH* genes.

17. The host cell of claim 14, wherein the host cell is deficient in both the high affinity arabinose transport system encoded by the *araFGH* genes and the low affinity arabinose transport system encoded by the *araE* gene.

25

Sub B1
18. A method of producing a recombinant protein product under the control of an inducible promoter and synchronously inducing expression of the product comprising: (a) culturing bacterial host cells that are genetically deficient in at least one system for active transport of an inducer of an inducible promoter into the host cells, wherein the host cells contain an expression vector encoding a recombinant protein product under the control of the inducible promoter; and (b)

30

inducing expression of the product with a concentration of inducer effective to synchronously induce the expression of the product by the host cells.

5 19. The method of claim 18, wherein the inducible promoter is an *araB* promoter.

Sub B1
20. The method of claim 19, wherein the inducer is arabinose.

10 21. The method of claim 20, wherein the host cells cannot grow on arabinose.

Sub B1
15 22. The method of claim 18, 19, 20, or 21, wherein the host cells are *E. coli*.

23. The method of claim 22, wherein the host cells are deficient in the low affinity arabinose transport system encoded by the *araE* gene.

20 24. The method of claim 22, wherein the host cells are deficient in the high affinity arabinose transport system encoded by the *araFGH* genes.

25 25. The method of claim 22, wherein the host cells are deficient in both the high affinity arabinose transport system encoded by the *araFGH* genes and the low affinity arabinose transport system encoded by the *araE* gene.

Sub B1
30 26. A method of reducing bacterial cell growth inhibition induced by an inducer of an inducible promoter comprising: (a) culturing bacterial host cells that are genetically deficient in at least one system for active transport of the inducer into the host cells, wherein the host cells contain an expression vector encoding a recombinant protein product under the control of the inducible promoter; and (b) inducing expression of the product with a concentration of inducer effective to induce the expression of the product in the host cells, but not

effective to inhibit growth of the cells as compared with that in transport-proficient cells.

27. The method of claim 26, wherein the inducible promoter is an *araB* promoter.

28. The method of claim 27, wherein the inducer is arabinose.

29. The method of claim 28, wherein the host cells cannot grow on arabinose.

30. The method of claim 26, 27, 28 or 29, wherein the host cells are *E. coli*.

31. The method of claim 30, wherein the host cells are deficient in the low affinity arabinose transport system encoded by the *araE* gene.

32. The method of claim 30, wherein the host cells are deficient in the high affinity arabinose transport system encoded by the *araFGH* genes.

33. The method of claim 30, wherein the host cells are deficient in both the high affinity arabinose transport system encoded by the *araFGH* genes and the low affinity arabinose transport system encoded by the *araE* gene.

34. A method of increasing yield of a recombinant protein product comprising: (a) culturing bacterial host cells that are genetically deficient in at least one system for active transport of an inducer of an inducible promoter into the host cells, wherein the host cells contain an expression vector encoding the recombinant protein product under the control of an inducible promoter; and (b) inducing expression of the product with a concentration of inducer effective to increase the yield of the host cells or the product.

35. The method of claim 34, wherein the yield of the host cells and the product is increased.

36. The method of claim 34, wherein the inducible promoter is an *araB* promoter.

5
Sub B1 37. The method of claim 36, wherein the inducer is arabinose.

38. The method of claim 37, wherein the host cells cannot grow on arabinose.

10
Sub B1 39. The method of claim 34, 35, 36, 37 or 38, wherein the host cells are *E. coli*.

40. The method of claim 39, wherein the host cells are deficient in the low affinity arabinose transport system encoded by the *araE* gene.

15

41. The method of claim 39, wherein the host cells are deficient in the high affinity arabinose transport system encoded by the *araFGH* genes.

42. The method of claim 39, wherein the host cells are deficient in both
20 the high affinity arabinose transport system encoded by the *araFGH* genes and the low affinity arabinose transport system encoded by the *araE* gene.

Sub B1 43. A method for producing a recombinant protein product under the control of an inducible promoter comprising: (a) culturing a bacterial host cell
25 that is genetically deficient in at least one system for active transport of an inducer of an inducible promoter into the host cell, wherein the host cell contains an expression vector encoding a recombinant protein product under the control of the promoter; and (b) inducing expression of the product with the inducer.

30 44. The method of claim 43, wherein the inducible promoter is an *araB* promoter.

Sub B1 45. The method of claim 44, wherein the inducer is arabinose.

46. The method of claim 45, wherein the host cell cannot grow on arabinose.

5 47. The method of claim ~~43, 44, 45 or 46~~, wherein the host cell is *E. coli*.

48. The method of claim 47, wherein the host cell is deficient in the low affinity arabinose transport system encoded by the *araE* gene.

10 49. The method of claim 47, wherein the host cell is deficient in the high affinity arabinose transport system encoded by the *araFGH* genes.

15 50. The method of claim 47, wherein the host cell is deficient in both the high affinity arabinose transport system encoded by the *araFGH* genes and the low affinity arabinose transport system encoded by the *araE* gene.

51. The method of claim 18, 26, 34 or 43 further comprising a step of recovering the product from the induced host cells.